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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/581,459	07/27/2000	STEPHAN SCHMITZ	10191/1452	7359
26646 7590 05/03/2007 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004				
			EXAMINER LIPMAN, JACOB	
			ART UNIT 2134	PAPER NUMBER
			MAIL DATE 05/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/581,459	SCHMITZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jacob Lipman	2134	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10,11 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10,11 and 14-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 11, and 14-18 are rejected under 35 U.S.C. 103(a) as being anticipated by Abraham et al., US Patent number 5,745,576 in view of Kousa, US Patent number 4,797,672.

With regard to claim 10, Abraham discloses a base station (controller) including a computer (column 12 lines 13-47) that transmits a prompt (column 9 lines 56-61, column 10 lines 56-59), and a remote control device (terminal, column 1 lines 13-15) which stores the prompt (column 9 lines 21-24, column 10 lines 60-62), and transmits a code word as a reply (column 9 lines 24-30, column 10 lines 63-64) that is partially a function of the prompt (column 9 lines 24-26, column 10 lines 64-65), the base station receives the reply and compares it with the required reply (column 10 lines 66-67), and grants access accordingly (column 11 lines 1-3). Abraham does not disclose that an initial stored prompt from a successful prompt/reply cycle is used to encrypt the authorization information. Kousa discloses that often an encrypted exchange will be preceded by a key exchange to create a session key to use in further authentications (column 2 lines 3-10). It is further added that the examiner takes official notice that key exchange to begin a session is well known in the art. It would have been obvious for

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one of ordinary skill in the art to use key exchange preceding Abraham to prevent eavesdropping. With regard to the base computer erasing the session key after a number of failed attempts, Abraham does not mention abandoning the process after a specific number of failed attempts. The examiner takes official notice that it is well known in the art to check failed attempts to connect, and to abandon an access process after a predetermined number of failures. It would have been obvious for one of ordinary skill in the art to use this check in Abraham's system to avoid eternal loops, and to increase security against hacking. Support for this can be seen in See et al., USPN 6,070,243. See discloses terminating a session with a user after a predetermined number of failed login attempts (column 11 lines 15-38). Further Schneier discloses that session keys are erased when a session is ended (page 180, paragraph beginning "some").

With regard to claim 11, Abraham discloses the response is a function of the terminal's serial number (column 9 lines 24-28).

With regard to claim 12, Abraham discloses the challenge is stored in the base system (column 9 lines 56-59).

With regard to claim 14, Abraham discloses the reply includes a transaction count (column 9 lines 24-26), which is tracked (column 10 lines 22-24).

With regard to claim 15, Abraham discloses the count is changed (column 31-35).

With regard to claim 16, Abraham discloses the counter code has been previously transmitted to the base station (column 9 lines 42-46).

With regard to claim 17, Abraham discloses the counter code is encrypted (column 9 lines 24-26).

With regard to claim 18, Abraham discloses the system of claim 10, as outlined above, but does not mention wireless communication or frequencies. The examiner takes official notice that it is well known in the art to have different wireless device working on different frequencies. It would have been obvious for one of ordinary skill in the art to use Abraham's system in a wireless environment with different frequencies to avoid interference and allow mobility.

### ***Response to Arguments***

3. Applicant's arguments filed 16 February 2007 have been fully considered but they are not persuasive.

With regard to applicant's argument that, "the encrypted challenge message must be stored to be decrypted" has not been taught, the examiner disagrees. It is well known in the art, that a computer cannot take action on data without storing it somewhere first. Further, Abraham discloses storing an initial key and hashing it to get the next key, which is also stored (column 7 lines 10-20).

With regard to applicant's argument that Abraham does not teach a system for access authorization, the examiner points out that Abraham teaches the claimed system, which can be used for access authorization. Abraham authenticates a cryptographic terminal so that the terminal can be accessed, and it can access other data. This can be seen in column 6 line 27-column 7 line 9. Further, Fig 3 has a final step of the controller welcoming the terminal. Simply changing the preamble to change

“A system for controlling an access authorization” to “A system for access authorization” does not change the scope of the claims.

The applicant argues that there is no motivation to combine Abraham and Kousa. The examiner points out that Abraham discloses a system that includes an initial key using a stored value (count value) to create an encryption key (column 4 lines 12-20). While the count value is from a former prompt reply/cycle, it is not necessarily from an initial prompt/reply cycle. While Abraham discloses information being sent a received, he does not disclose a specific wrapper to secure information from attacks and eavesdropping. Kousa discloses that often an encrypted exchange will be preceded by a key exchange to create a session key to use in further authentications (column 2 lines 3-10), and could thus prevent eavesdropping and other attacks that are very well known in the art (column 1 lines 52-58).

With regard to applicant's argument that the examiner has failed to show that it would be obvious to delete the initial prompt after a predetermined number of failed attempts, the examiner points again to See and Schneier. It is very well known in the art to allow only a predetermined number of access attempts before refusing further attempts, as shown in See. In the combination of Abraham and Kousa, it would not be practical to hold onto the negotiated initial key, without overloading memory with extra useless keys. That is why it would be obvious to one of ordinary skill in the art to apply the teaching of Schneier to delete a session key when the session is over.

### ***Conclusion***

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 571-272-3837. The examiner can normally be reached on M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL 